What is claimed is:

1. A semiconductor integrated circuit comprising:

a capacitor element which defines a prescribed decay time constant with at least one resistor;

an MOS transistor connected to the capacitor element via a gate; and

a constant current generating element operative to generate a constant current,

wherein a linearly changing voltage is applied to the gate of the MOS transistor by charging the capacitor element with the constant current, said linearly changing voltage causing the MOS transistor to output a smoothly changing current in accordance with the linearly changing voltage.

2. A driving amplifier for driving an acoustic element, said driving amplifier comprising the semiconductor integrated circuit as claimed in claim 1, wherein an output of the driving amplifier is smoothly changed using the linearly changing voltage generated by the semiconductor integrated circuit when an operational condition changes.

3. The driving as claimed in claim 2, further comprising an inversion operational amplifier having a positive reference input terminal, wherein an output of said semiconductor integrated circuit is applied to the positive reference input terminal.

4. The semiconductor integrated circuit of claim 1, wherein an output of a driving amplifier for driving an acoustic element is smoothly changed using the linearly changing voltage generated by the semiconductor integrated circuit, when an operational condition changes.

5. A method for driving an acoustic element, comprising:

generating a linearly changing voltage by applying a constant current to charge a capacitor element which defines a prescribed decay time constant with one or more resistors; and

applying the linearly changing voltage to a gate of a MOS transistor to generate a smoothly changed current, when an operational condition changes.

6. The method of claim 5, further comprising:

supplying the smoothly changed current to the acoustic element.